

Application Serial No.: 09/709,935  
Attorney Docket No. 032028-0311103

### **REMARKS**

By this Amendment, claims 18-28 have been cancelled without prejudice or disclaimer, and claims 29-44 have been newly added. Claims 1-17 were cancelled in a previous Amendment. Therefore, claims 29-44 are pending. Support for the instant amendments is provided throughout the as-filed Specification. Thus, no new matter has been added. In view of the foregoing amendments and following comments, allowance of all the claims pending in the application is respectfully requested.

### **INFORMATION DISCLOSURE STATEMENT (I.D.S.)**

Applicants thank the Examiner for considering the references cited in the Information Disclosure Statement submitted on September 13, 2002. A signed copy of the Form PTO-1449 for this submission was provided by the Examiner, via facsimile, on March 21, 2005.

### **SPECIFICATION**

Applicants have amended the Specification as follows:

1. A new paragraph was added to the Specification at pg. 1, line 1, prior to the paragraph entitled "Field of the Invention," to add continuity data for the above-referenced application.
2. At page 1, line 2, "nitrous" has been changed to "nitrogen" to correctly correspond to NO<sub>x</sub>. The compound "nitrous oxide," as originally presented, refers to N<sub>2</sub>O.
3. The paragraph beginning at pg. 6, line 15, was rewritten to correct the following errors:

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- a. At pg. 6, line 21, “data is” has been changed to “data are” to correct a grammatical error.
- b. Additionally, at pg. 6, line 21, “326nm” has been changed to “226nm” to correct a typographical error. There is no peak for NO at 326nm. Rather, the absorption peak of NO typically occurs around a wavelength of approximately around 226nm. This is known in the art as evidenced by, for example, Zhang et al, *J. Air Waste Management Association*, vol. 46, pgs. 25-29, 1996, column 3. This reference was cited in the IDS submitted by Applicants on September 13, 2002. It is document “P43” on the corresponding Form PTO-1449.

Applicants submit that the changes to the Specification described above do not constitute the addition of new matter. Accordingly, Applicants respectfully request that the Examiner approve the changes to the Specification.

#### DRAWINGS

The Replacement Sheet for FIGS. 1 & 2, attached in APPENDIX A, reflects a correction to FIG. 1, wherein 326nm has been changed to 226nm to be consistent with the corrections to the Specification. Applicants submit that the changes to the drawing figures described above do not constitute the addition of new matter. Accordingly, Applicants respectfully request that the Examiner approve the changes to the drawing figures.

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### CLAIMS

Claims 29-44 have been added to clarify various aspects of Applicants' invention. Claims 29-44 are further patentable over the references of record for *at least* the reason that the references of record do not appear to disclose, teach, or suggest *at least* the features of using a baseline intensity to compensate for changes in the initial intensity when calculating the concentration of NO<sub>x</sub> in the exhaust plume, wherein the baseline intensity is determined by interpolating a substantially linear region over an absorption dip in an absorption curve generated from the intensities measured while the beam of radiation is passing through the exhaust plume of the vehicle. The foregoing features are included in each of independent claims 29 and 37.

Applicants further submit that dependent claims 30-36 and 38-44 are allowable because they depend from allowable independent claims, as well as for the further limitations they contain.

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**CONCLUSION**

It is respectfully submitted that the application is in condition for allowance. Notice to that effect is respectfully requested. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Date: May 26, 2005

Respectfully submitted,

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**AMENDMENTS TO THE DRAWINGS:**

- The one (1) attached drawing sheet in **APPENDIX A** replaces the original sheet depicting FIGS. 1 & 2.
  
- The change made to FIG. 1 is described in the **Remarks** section beginning on page **10** of this paper.

**APPENDIX A:**      Replacement Sheet for FIGS. 1 & 2.